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EXAMINER	
AMIN, JWALANT B	

ART UNIT	PAPER NUMBER
2676	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/782,255	SALESIN ET AL.	
	Examiner	Art Unit	
	Jwalant Amin	2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02/19/2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *02/19/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claim 1 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 2 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 2 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 3 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 3 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 4 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 4 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 5 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 5 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 6 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 6 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 7 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 7 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 8 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 8 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 9 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 9 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 10 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 10 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 11 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 11 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 12 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 12 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 13 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 13 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 14 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 14 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 15 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 15 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 16 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 17 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 16 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 32 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 23 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 33 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 24 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 34 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 25 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 35 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 23 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 36 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 23 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 37 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 23 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

Claim 38 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 26 of prior U.S. Patent No. 6,760,028. This is a double patenting rejection.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 18 – 26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 17 – 22 of U.S. Patent No. 6,760,028.

As to claim 18, all the features are found in claim 17 (6,760,028), except that the TrueType font of the target character is different than the TrueType font of the source character. However, it would have been obvious to one of ordinary skill in the art at the time the present invention was made to realize that for transferring the hints from the source character to the target character, the TrueType font for the source character would have to be different from TrueType font of the target character.

As to claim 19, all the features are found in claim 18 (6,760,028), except that the TrueType font of the target character is different than the TrueType font of the source character. As discussed hereinabove in claim 18, a non-statutory double patenting rejection, claim 19 will be treated accordingly.

As to claim 20, all the features are found in claim 19 (6,760,028), except that the TrueType font of the target character is different than the TrueType font of the source character. As discussed hereinabove in claim 18, a non-statutory double patenting rejection, claim 20 will be treated accordingly.

As to claim 21, all the features are found in claim 17 (6,760,028), except that the TrueType font of the target character is different than the TrueType font of the source character. As discussed hereinabove in claim 18, a non-statutory double patenting rejection, claim 21 will be treated accordingly.

As to claim 22, all the features are found in claim 17 (6,760,028), except that the TrueType font of the target character is different than the TrueType font of the source character. As discussed hereinabove in claim 18, a non-statutory double patenting rejection, claim 22 will be treated accordingly.

As to claim 23, all the features are found in claim 20 (6,760,028), except that the TrueType font of the target character is different than the TrueType font of the source character. As discussed hereinabove in claim 18, a non-statutory double patenting rejection, claim 23 will be treated accordingly.

As to claim 24, all the features are found in claim 21(6,760,028), except that the TrueType font of the target character is different than the TrueType font of the source character. As discussed hereinabove in claim 18, a non-statutory double patenting rejection, claim 24 will be treated accordingly.

As to claim 25, all the features are found in claim 17 (6,760,028), except that the TrueType font of the target character is different than the TrueType font of the source character. As discussed hereinabove in claim 18, a non-statutory double patenting rejection, claim 25 will be treated accordingly.

As to claim 26, all the features are found in claim 22 (6,760,028), except that the TrueType font of the target character is different than the TrueType font of the source character. As discussed hereinabove in claim 18, a non-statutory double patenting rejection, claim 26 will be treated accordingly.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 32, 34-36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hellmann (5,982,387).

7. Regarding claim 32, Hellmann discloses a hint assigning method comprising:

A method of providing a hinted font ("A method of assigning hints for outline-font creation", line 1 or abstract);

Defining hints for a glyph of a first font, the hints being defined by one or more statements that contain multiple values that define constraints for the glyph, at least one of the values referencing a table entry that corresponds to a table value that is used to constrain the glyph ("a hint is assigned by operator operation to a predetermined position of the outline of a master stroke in each class Ci...hint information is created and stored in the data base 34 to correspond to the contour points P1-Pn of a master

stroke as illustrated in Fig. 7", col. 11 lines 7-25 and Fig. 7; it is noted that while the claim recites a table, however it would have been obvious to one in the art to realize that by using a data base to store hint information provides the same functionality of using table);

Establishing an association between the glyph of the first font and a glyph of a second font, the second font being different from the first font ("character elements whose shapes are similar and to which identical hint information is assigned are divided into classes automatically, a hint is assigned solely to the master element of each class by operator operation", col. 5 lines 55-59; it is noted that Hellmann discloses within a class, a master element which has been hinted (first font) and other similar shapes element which are not hinted (second font) are identified, thus it meets the limitation of claim).

Translating the one or more statements so that the one or more statements now pertain to and define constraints for the glyph of the second font ("a hint is assigned solely to the master element of each class by operator operation and the system is made to learn the assignment of the hint, then the system can subsequently assign hints to other elements automatically", col.5 lines 60-61).

It is further noted that while claim recites "glyph", the term is broad enough to comprise the font characters used by Hellmann.

8. Regarding claim 34, Hellmann discloses a hint assigning method comprising:

Translating comprises manipulating at least some of the values of the one or more statements ("If a best matching master stroke has been obtained, the hint

information (hint type, hint position) that has been assigned to the best matching master stroke is applied to the target master stroke (205). Thereafter, or if a best matching master stroke could not be obtained at step 204, hint editing (generation, revision, deletion) is performed on the control screen and the hint is assigned to the target master stroke (step 206)", col. 14 lines 56-63).

9. Regarding claim 35, Hellmann discloses a hint assigning method comprising:

Some of the values pertain to specific points on the glyph of the first font; establishing an association between the specific points on the glyph of the first font and specific points on the glyph of the second font ("Accordingly, a hint yH, which was assigned to point B of the master stroke, is applied to the contour of point B' of the target stroke", col. 18 lines 37-41 and Fig. 28B);

Translating comprises changing at least some of the values of the individual statements to correspond to the specific points on the glyph of the second font ("If a best matching master stroke has been obtained, the hint information (hint type, hint position) that has been assigned to the best matching master stroke is applied to the target master stroke (205). Thereafter, or if a best matching master stroke could not be obtained at step 204, hint editing (generation, revision, deletion) is performed on the control screen and the hint is assigned to the target master stroke (step 206)", col. 14 lines 56-63).

10. Regarding claim 36, Hellmann discloses a hint assigning method comprising:

Changing of at least some values comprises changing a table value ("If assignment of a hint to the target master stroke is finished by way of the foregoing

processing, the hint information is stored in the character data base 34 to correspond to the target master stroke or stroke class (step207), col. 14 lines 56-67 and elements 206 and 207 of Fig. 16).

11. Regarding claim 38, the statement presented above, with respect to claim 32 is incorporated herein.

12. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hellmann (5,982,387) as applied to claim 32 above, and further in view of Kaasila (5,155,805).

Regarding claim 37, it is noted that Hellmann does not disclose changing of the table value; determining a plurality of natural distances in the glyph of the font, the natural distances being defined relative to specific points in the glyph of the font that are to be constrained by the table value; and calculating a new table value for the table entry as a function of the natural distances. However this is known in the art taught by Kaasila. Kaasila teaches a method and apparatus for moving control points in displaying digital typeface on raster output devices comprising:

Changing of the table value ("The Pre-Program in Fig. 4 is a collection of instructions that modify the Control Value Table within the outline font", col. 7 lines 3-5);

Determining a plurality of natural distances in the glyph of the second font, the natural distances being defined relative to specific points in the glyph of the second font that are to be constrained by the table value ("The contents of the Control Value Table correspond to the basic units of measurement in the field of digital typography. X-height is the basic height of the lower case letter 'x', while ascender is that parts of the lower

case letters that reach above the x-height and descender is that parts that fall below the baseline", col. 6 lines 55-68);

Calculating a new table value for the table entry as a function of the natural distances ("using values from the Control Value Table can scale glyphs to the appropriate point size...whenever the user selects a new font or a new point size in the same font, the Pre-Program is executed to modify the values in the Control Value Table", col. 7 lines 1-15).

It would have been obvious at the time of invention was made to one of ordinary skill in the art to utilize teaching of Kaasila to provide the advantage to "improve the font rendering engine's control over outlines of a glyph a low taster resolutions" (col. 2 lines 38-39, Kaasila).

13. Claims 1-31, 33, and 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hellmann (5,982,387), and further in view of Weyand (5,577,183).

14. Regarding claim 1, Hellmann discloses a hint assigning method comprising:

Selecting a first True-type font that has been hinted with hints that define constraints between control points associated with individual characters of the font ("a hint is assigned by operator operation to a predetermined position of the outline of a master stroke in each class Ci...hint information is created and stored in the data base 34 to correspond to the contour points P1-Pn of a master stroke as illustrated in Fig. 7", col. 11 lines 7-25 and Fig. 7);

Identifying individual characters of a second TrueType font that correspond to individual characters of the first True-type font, the second True-type font being different

from the first TrueType font, individual characters of the second TrueType font being unhinted ("character elements whose shapes are similar and to which identical hint information is assigned are divided into classes automatically, a hint is assigned solely to the master element of each class by operator operation", col. 5 lines 55-59; It is noted that Hellmann discloses within a class, a master element which has been hinted (first font) and other similar shapes element which are not hinted (second font) are identified, thus it meets the limitation of claim);

Transferring hints from characters of the first True-Type font to individual corresponding characters of the second True-Type font ("a hint is assigned solely to the master element of each class by operator operation and the system is made to learn the assignment of the hint, then the system can subsequently assign hints to other elements automatically", col. 5 lines 60-61).

It is noted that Hellmann does not disclose that the characters are TrueType fonts; instead Kanji characters were used as an example. However, this is known in the art taught by Weyand. Weyand teaches, "TrueType is an industry standard which defines the representation of certain computer outline font data. When the TrueType format is employed to represent large fonts (e.g. Kanji), memory requirements may exceed 2-5 megabytes" (col. 1 lines 21-25). It would have been obvious at the time of invention was made to one of ordinary skill in the art to understand the teaching of Weyand that the TrueType font is an industry standard to represent fonts such as Kanji characters used by Hellmann.

15. Regarding claim 2, Hellmann discloses a hint assigning method comprising:

First TrueType font comprises a font that has control-point level hints attached to it and said transferring of the hints comprises transferring the control-point level hints from characters of the first TrueType font to control-point level hints in characters of the second TrueType font ("obtaining a contour point on the element of interest nearest the hint position of the master element; and applying hint information at the hint position to the obtained contour point", col. 26 lines 4-7).

It is noted that Hellmann does not disclose that the characters are TrueType fonts; instead Kanji characters were used as an example. However, this is known in the art taught by Weyand as discussed with respect to claim 1 above.

16. Regarding claim 3, Hellmann discloses a hint assigning method comprising:

At least one control point of the first TrueType font has been programmatically relocated to lie on top of another control point of the first TrueType font ("First, single corresponding points Ps, Ps' on the size-equalized master stroke MSTa (see FIG. 22), to which a hint has been assigned, and single segments Ss, Ss' having the corresponding points Ps, Ps' as their end points are superimposed", col. 16 lines 44-49, Fig. 22 and col. 25 line 44).

It is noted that Hellmann does not disclose that the characters are TrueType fonts; instead Kanji characters were used as an example. However, this is known in the art taught by Weyand as discussed with respect to claim 1 above.

17. Regarding claims 4 and 5, Hellmann discloses a hint assigning method comprising:

Selecting comprises selecting the first font from among a number of different fully hinted fonts that are resident in a library ("when a hint is assigned to a master element of each class, obtaining a best matching master element which, among the master elements to which hints have been assigned, most resembles a master element of interest" and "The following information is stored in the character data base 34...(5) various information (classified strokes, master-stroke hint information, stroke hint information, etc.) generated when hints are assigned", col. 25 line 1-4, col. 10 lines 43-54 and element 34 of Fig. 4; It is further noted that while the claim recites the term library, however, it would be obvious to one of ordinary skill in the art to realize that library is just another term meaning storing fonts information in a database. Thus the claim limitation is met).

It is noted that Hellmann does not disclose that the characters are TrueType fonts; instead Kanji characters were used as an example. However, this is known in the art taught by Weyand as discussed with respect to claim 1 above.

18. Regarding claim 6, Hellmann discloses a hint assigning method comprising:

Selecting comprises further selecting a font that is different from the first and second fonts, and transferring hints from characters of the selected different font to individual characters of the second font ("character elements whose shapes are similar and to which identical hint information is assigned are divided into classes automatically, a hint is assigned solely to the master element of each class by operator operation and the system is made to learn the assignment of the hint, then the system can subsequently assign hints to other elements automatically", col. 5 lines 55-61; It is

noted that within each class, elements from different characters are collected. The system assigns hints from master element (first font) to other elements with similar shapes (second font). Thus, limitation of claim is met).

It is noted that Hellmann does not disclose that the characters are TrueType fonts; instead Kanji characters were used as an example. However, this is known in the art taught by Weyand as discussed with respect to claim 1 above.

19. Regarding claim 7, Hellmann discloses a hint assigning method comprising:

Identifying comprises matching one or more contours on a character of the first font with one or more contours of a character of the second font ("The scaling equations are derived in such a manner that an attribute segment A'B' of the target stroke (Stroke 2) will overlap the corresponding attribute segment AB of the master stroke (Stroke 1)", col. 18 lines 18-41 and Fig. 28A; It is noted that within each class, elements from different characters are collected. The system assigns hints from master element (first font) to other elements with similar shapes (second font). Thus, limitation of claim is met).

It is noted that Hellmann does not disclose that the characters are TrueType fonts; instead Kanji characters were used as an example. However, this is known in the art taught by Weyand as discussed with respect to claim 1 above.

20. Regarding claim 8, Hellmann discloses a hint assigning method comprising:

Matching, pairing individual points associated with a contour of the character of the first font with individual respective points associated with a corresponding contour of the character of the second font ("the corresponding points A, A' and C, C' of the target

stroke and master stroke (FIG. 28B) are superimposed and the outline contour points of the target stroke nearest to respective ones of the predetermined hint positions B, D of the master stroke are obtained", col. 18 lines 18-41 and Fig. 28B; It is noted that within each class, elements from different characters are collected. The system assigns hints from master element (first font) to other elements with similar shapes (second font). Thus, limitation of claim is met).

It is noted that Hellmann does not disclose that the characters are TrueType fonts; instead Kanji characters were used as an example. However, this is known in the art taught by Weyand as discussed with respect to claim 1 above.

21. Regarding claim 9, Hellmann discloses a hint assigning method comprising:

Transferring hints that are defined in terms of the individual points associated with the contour of the character of the first font ("Accordingly, a hint yH, which was assigned to point B of the master stroke, is applied to the contour point B' of the target stroke", col. 18 lines 37-41 and Fig. 28B; It is noted that within each class, elements from different characters are collected. The system assigns hints from master element (first font) to other elements with similar shapes (second font). Thus, limitation of claim is met).

It is noted that Hellmann does not disclose that the characters are TrueType fonts; instead Kanji characters were used as an example. However, this is known in the art taught by Weyand as discussed with respect to claim 1 above.

22. Regarding claim 10, Hellmann discloses a hint assigning method comprising:

Transferring comprises transferring hints that are defined in terms of individual points associated with the contour of the character of the first font by changing the definition of the hints to refer to individual points associated with the contour of the character of the second font ("If a best matching master stroke has been obtained, the hint information (hint type, hint position) that has been assigned to the best matching master stroke is applied to the target master stroke (205). Thereafter, or if a best matching master stroke could not be obtained at step 204, hint editing (generation, revision, deletion) is performed on the control screen and the hint is assigned to the target master stroke (step 206)" and "obtaining a contour point on the element of interest nearest the hint position of the master element; and applying hint information at the hint position to the obtained contour point", col. 14 lines 56-63, col. 26 lines 4-7). It is noted that by hint editing, hint definition is changed. Thus, limitation of claim is met.

It is noted that Hellmann does not disclose that the characters are TrueType fonts; instead Kanji characters were used as an example. However, this is known in the art taught by Weyand as discussed with respect to claim 1 above.

23. Regarding claim 11, Hellmann discloses a hint assigning method comprising: Pairing of the individual points defines one set of multiple point pairs, and further comprising defining multiple sets of point pairs, each set of point pairs comprising different pairings of points ("the corresponding points A, A' and C, C' of the target stroke and master stroke (FIG. 28B) are superimposed and the outline contour points of the target stroke nearest to respective ones of the predetermined hint positions B, D of the master stroke are obtained", col. 18 lines 18-41 and Fig. 28B).

24. Regarding claim 12, Hellmann discloses a hint assigning method comprising:

Calculating a score for each set of point pairs ("Further, the lengths of the scanning lines in the overlapping portions of the master strokes MSTa, MSTb are summed and the sum is adopted as the area of overlap", col. 16 lines 44-67 and Fig. 23). It is further noted that in Fig. 22 and 23, every set of points (Xs, Xe) has a spacing length with predetermined scanned lines (SL1, SL2, ..., SLn in Fig. 22), which is used to determine the overlap area. The overlap area is then used as the degree of similarity. Although the claim recites the term score, it would have been obvious to one of ordinary skill in the art to realize that the determined spacing length for each set of point pairs with predetermined scanned lines has the same function of giving a score to each set of point pairs. Both use the number to determine the degree of similarity.

Selecting a set of point pairs based upon the calculated score; said transferring comprising using the selected set of point pairs as a basis for transferring the hints ("In finding a best matching master stroke, first the degree of similarity between the target master stroke and a candidate master stroke is calculated" and "If learning is finished, hints are assigned to all strokes automatically using the hint information that has been assigned to the master stroke of each class", col. 16 lines 40-42, col. 17 lines 29-31). It is noted that, by using the degree of similarity (score), the best matching master stroke (sets of point pairs) is selected. Then the master stroke is used as a basis for transferring the hints. Thus, the limitation of the claim is met.

25. Regarding claim 13, Hellmann discloses a hint assigning method comprising:

Calculating an individual local score; and summing the individual local scores for all of the individual pairs of points to provide an overall score for each set of point pairs; said selecting of the set of point pairs comprising selecting the set with the best overall score ("In finding a best matching master stroke, first the degree of similarity between the target master stroke and a candidate master is calculated...Further, the lengths of the scanning lines in the overlapping portions of the master strokes MSTa, MSTb are summed and the sum is adopted as the area of overlap", col. 16 lines 40-67 and Fig. 23). It is further noted that in Fig. 22 and 23, every set of points (Xs, Xe) has a spacing length with predetermined scanned lines (SL1, SL2, ..., SLn in Fig. 22), which is used to determine the overlap area. The overlap area is then used as the degree of similarity. Although the claim recites the term score, it would have been obvious to one of ordinary skill in the art to realize that the determined spacing length for each set of point pairs with predetermined scanned lines has the same function of giving a score to each set of point pairs. Thus, it meets the limitation of the claim.

26. Regarding claim 14, the statement presented above, with respect to claim 1 is incorporated herein. See also lines 10-20 of col. 28.

27. Regarding claim 15, Hellmann discloses a hint assigning method comprising: Transferring one or more conditionally-specified hints ("A hint for which the direction of contour control is the X direction is referred to as an 'X hint', and a hint for which the direction of contour control is Y direction is referred to as an 'Y hint'" and "The system subsequently assigns hints to the other strokes automatically", col. 11 lines 16-20, lines 42-43, and Fig. 7).

28. Regarding claim 16, Hellmann discloses a hint assigning method comprising:

Discarding a hint where it appears inappropriate for a character of the second font ("If a best matching master stroke has been obtained, the hint information (hint type, hint position) that has been assigned to the best matching master stroke is applied to the target master stroke (205). Thereafter, or if a best matching master stroke could not be obtained at step 204, hint editing (generation, revision, deletion) is performed on the control screen and the hint is assigned to the target master stroke (step 206)", col. 14 lines 56-63). It is noted that by hint editing, deletion of hints is possible. Thus, it meets the limitation of the claim.

29. Regarding claim 17, Hellmann discloses a hint assigning method comprising:

Defining at least one conditionally specified hint associated with a character of the first font, and transferring said conditionally specified hint if a condition associated with the conditionally specified hint is met by a corresponding character of the second font ("A hint for which the direction of contour control is the X direction is referred to as an 'X hint', and a hint for which the direction of contour control is Y direction is referred to as an 'Y hint'" and "If a best matching master stroke has been obtained, the hint information (hint type, hint position) that has been assigned to the best matching master stroke is applied to the target master stroke", col. 11 lines 7-21, col. 14 lines 56-59 and Fig. 7). It is further noted that the hint condition is used to classify character strokes (col. 11 lines 22-37), as result, all similar character strokes, which the hint condition has met, are classified within a class. Therefore, the same hints are assigned to all of the strokes

within the same class if best matching master stroke is obtained. Thus, the limitation of the claim is met.

30. Regarding claim 18, the statement presented above, with respect to claim 1 is incorporated herein. See also lines 10-20 of col. 28.

31. Regarding claim 19, Hellmann discloses a hint assigning method comprising:

Transferring comprises modifying control point references contained in the hints ("Accordingly, a hint yH, which was assigned to point B of the master stroke, is applied to the contour point B' of the target stroke", col. 18 lines 37-41 and Fig. 28B).

32. Regarding claim 20, Hellmann discloses a hint assigning method comprising:

Transferring comprises modifying one or more values contained in a table that is referenced by at least one hint ("If a best matching master stroke has been obtained, the hint information (hint type, hint position) that has been assigned to the best matching master stroke is applied to the target master stroke (205). Thereafter, or if a best matching master stroke could not be obtained at step 204, hint editing (generation, revision, deletion) is performed on the control screen and the hint is assigned to the target master stroke (step 206). If assignment of a hint to the target master stroke is finished by way of the foregoing processing, the hint information is stored in the character data base 34 to correspond to the target master stroke or stroke class (step207), col. 14 lines 56-67 and elements 206 and 207 of Fig. 16). While the claim recites "table", and Hellmann discloses database, it would have been obvious for one in ordinary skill in the art to realize that both terms has the same function, which is to store hint information.

33. Regarding claims 21 and 22, Hellmann discloses a hint assigning method comprising:

Transferring comprises pairing individual control points associated with the source character with individual control points associated with the target character to define a set of multiple pairs of control points, and, for each pair of control points, calculating a score that characterizes the pair of control points; the score characterizes the desirability of a match between the control points ("Further, the lengths of the scanning lines in the overlapping portions of the master strokes MSTa, MSTb are summed and the sum is adopted as the area of overlap", col. 16 lines 44-67 and Fig. 23). It is further noted that in Fig. 22 and 23, every set of points (Xs, Xe) has a spacing length with predetermined scanned lines (SL1, SL2, ..., SLn in Fig. 22), which is used to determine the overlap area. The overlap area is then used as the degree of similarity. Although the claim recites the term score, it would have been obvious to one of ordinary skill in the art to realize that the determined spacing length for each set of point pairs with predetermined scanned lines has the same function of giving a score to each set of point pairs. Both use the number to determine the degree of similarity.

34. Regarding claim 23, Hellmann discloses a hint assigning method comprising:

The desirability of the match is a function of incoming/outgoing directions that are associated with each control point ("an angle of 0~360 degree is divided up into eight directional zones and it is determined in which directional zone the short vector belongs", col. 12 lines 43-64 and Fig. 10, 11A, 11B, and 12). It is noted that while the claim recites incoming/outgoing directions, Hellmann discloses positive or negative

directions (Fig. 11B). It would have been obvious for one in ordinary skill in the art to realize that both terms serve the same function, which is to determine the direction of a particular point. Also, this function is used to classify or match similar strokes (Fig. 8 and Fig. 9). Therefore, it meets the limitation of the claim.

35. Regarding claim 24, Hellmann discloses a hint assigning method comprising:

The desirability of the match is a function of a control point constituting a local minimum or maximum ("The array of extremal points will be the array Xmax, Xmin, Ymax, Ymin that appears along the outline of the stroke", col. 15 lines 57-64).

36. Regarding claim 25, Hellmann discloses a hint assigning method comprising:

The desirability of the match is a function of incoming/outgoing lines associated with the control points ("an angle of 0~360 degree is divided up into eight directional zones and it is determined in which directional zone the short vector belongs", col. 12 lines 43-64 and Fig. 10, 11A, 11B, and 12). It is noted that while the claim recites incoming/outgoing directions, Hellmann discloses positive or negative directions (Fig. 11B). It would have been obvious for one in ordinary skill in the art to realize that both terms serve the same function, which is to determine the direction of a particular point. Also, this function is used to classify or match similar strokes (Fig. 8 and Fig. 9). Therefore, it meets the limitation of the claim.

37. Regarding claim 26, Hellmann discloses a hint assigning method comprising:

The desirability of the match considers whether each control point of a pair falls into one of a plurality of common bands that are defined for each character ("As shown in Fig. 11A, an angle of 0~360 degree is divided up into eight directional zones and it is

determined in which directional zone the short vector belongs", col. 12 lines 50-67, col. 12 lines 1-18, and Fig. 11, 12, and 13).

38. Regarding claim 27, Hellmann discloses a hint assigning method comprising:

Defining multiple sets of multiple pairs of control points (see sets of points (Xs, Xe) in Fig. 23);

Calculating a score for each pair of control points for each of the multiple sets, summing individual control point pair scores for each set of multiple pairs of control points to provide an overall score ("Further, the lengths of the scanning lines in the overlapping portions of the master strokes MSTa, MSTb are summed and the sum is adopted as the area of overlap", col. 16 lines 44-67 and Fig. 23). It is further noted that in Fig. 22 and 23, every set of points (Xs, Xe) has a spacing length with predetermined scanned lines (SL1, SL2, ..., SLn in Fig. 22), which is used to determine the overlap area. The overlap area is then used as the degree of similarity. Although the claim recites the term score, it would have been obvious to one of ordinary skill in the art to realize that the determined spacing length for each set of point pairs with predetermined scanned lines has the same function of giving a score to each set of point pairs. Both use the number to determine the degree of similarity.

Selecting a set of multiple pairs of control points based upon the overall score; transferring the hints using the selected set of multiple pairs of control points as a basis for said transferring ("In finding a best matching master stroke, first the degree of similarity between the target master stroke and a candidate master stroke is calculated" and "If learning is finished, hints are assigned to all strokes automatically using the hint

information that has been assigned to the master stroke of each class", col. 16 lines 40-42, col. 17 lines 29-31). It is noted that, by using the degree of similarity (score), the best matching master stroke (sets of point pairs) is selected. Then the master stroke is used as a basis for transferring the hints. Thus, the limitation of the claim is met.

39. Regarding claim 28, Hellmann discloses a hint assigning method comprising:

The control points that comprise the multiple pairs comprise control points that are located on a contour associated with the individual character ("the corresponding points A, A' and C, C' of the target stroke and master stroke (FIG. 28B) are superimposed and the outline contour points of the target stroke nearest to respective ones of the predetermined hint positions B, D of the master stroke are obtained", col. 18 lines 18-41 and Fig. 28B).

40. Regarding claims 29 and 30, Hellmann discloses a hint assigning method comprising:

Defining of the multiple sets of multiple pairs; selecting a control point on the source character as a starting point; selecting a control point on the target character as a starting point; pairing the two selected points, selecting a different control point on the source character and pairing it with a selected control point on the target character and continuing to select and pair control points on the source character until there are no unpaired control points on the source character; each set of the multiple sets of multiple pairs comprises different pairings of selected points ("In equalization processing, first reference is made to the stroke attribute lists of the master stroke and target stroke and the starting and end points of all attribute segments of these two strokes are correlated

(step 302a). FIGS. 27A, 27B illustrate the correlation between the starting and end points of the attribute segments of a target stroke (Stroke 2) and master stroke (Stroke 1)", col. 17 lines 63-67, col. 18 lines 1-2, and Fig. 25-27. It is further noted that element 306 of Fig. 25, the process repeats until all strokes are completed).

41. Regarding claim 31, the statement presented above, with respect to claim 1 is incorporated herein. See also lines 10-20 of col. 28.

42. Regarding claim 33, it is noted that Hellmann does not disclose that the characters are TrueType fonts; instead Kanji characters were used as an example. However, this is known in the art taught by Weyand as discussed with respect to claim 1, above.

43. Regarding claim 39, the statement presented above, with respect to claim 1 is incorporated herein.

44. Regarding claim 40, the statement presented above, with respect to claim 7 is incorporated herein.

45. Regarding claim 41, the statement presented above, with respect to claims 2 and 10 are incorporated herein.

46. Regarding claim 42, Hellmann discloses a hint assigning method comprising:

The automated hinting system transfers the hints by pairing individual control points associated with characters and transferring hints that are defined in terms of the individual control points ("Accordingly, a hint yH, which was assigned to point B of the master stroke, is applied to the contour of point B' of the target stroke", col. 18 lines 37-41 and Fig. 28B; It is noted that within each class, elements from different characters

are collected. The system assigns hints from master element (first font) to other elements with similar shapes (second font). Thus, limitations of claim are met).

The transferring comprising changing a hint definition to refer to one or more control points associated with the character to which the hint is transferred ("If a best matching master stroke has been obtained, the hint information (hint type, hint position) that has been assigned to the best matching master stroke is applied to the target master stroke (205). Thereafter, or if a best matching master stroke could not be obtained at step 204, hint editing (generation, revision, deletion) is performed on the control screen and the hint is assigned to the target master stroke (step 206)", col. 14 lines 56-63 and elements 206 and 207 of Fig. 16). It is noted that by hint editing, hint definition is changed. Thus, the limitation of claim is met.

47. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jwalant Amin whose telephone number is (571) 272-2455. The examiner can normally be reached on Monday – Friday from 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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